



May 2001

Issues Paper 5-01

CONTAGION AND STABILITY

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History teaches us that disease has killed far more people than warfare: in the US Civil War more casualties resulted from disease than combat. Empires such as the Aztecs, and powerful, warlike cultures as in Hawaii, have been devastated by infectious disease. Disease was used as an element of warfare long before the term biological warfare became a common term; the French introduction of smallpox among Native American populations and the contamination of water supplies are cases in point.

The new millennium brings heightened interest in the security dimension of disease and its role in promoting conflict and destabilizing regions on which US national security interests turn. Technology has “globalized” the once geographically intimidating world at a time when exponential population growth is leading to uncontrolled migration, unmanageably high rates of urbanization, and failed states. Newly democratic regimes struggle to meet the resource demands of populations that may double in less than twenty years. Clean water and health are sacrificed for the pesticide protected and highly fertilized “miracle grains” necessary to feed the burgeoning populations, at the same time that weather pattern changes are fostering disease resurgence and organisms are developing immunity to long prescribed drugs. Diseases like tuberculosis, once thought constrained, are sweeping through relatively industrialized states such as Russia and are threatening populations weakened by a devastating and new international



India's Future Generation

disease: HIV/AIDS. Bovine spongiform encephalopathy (mad cow disease) and foot-and-mouth outbreaks and biological warfare terrorism threats make clear that national security may be threatened by disease at home as well as overseas.

To better understand the implications of medical issues for national security the Woodrow Wilson Center's Environmental Change and Security Project, The University of Michigan Population Fellows Program, and the Army War College's Center for Strategic Leadership hosted the *Contagion and Stability Game* May 15-17, 2001 at The Collins Center, Carlisle Barracks, Pennsylvania.

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE MAY 2001		2. REPORT TYPE N/A		3. DATES COVERED -	
4. TITLE AND SUBTITLE Contagion and Stability				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Center for Strategic Leadership 650 Wright Avenue Carlisle, PA 17013-5049				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited					
13. SUPPLEMENTARY NOTES The original document contains color images.					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES 4	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

PURPOSE

The Contagion and Stability Game provided a forum for discussing the military, economic, informational, political, and medical aspects of contagion in an environmentally stressed region of the less-developed world – South Asia. Conference planners developed a scenario set in contemporary India that incorporated natural disaster, the growing local population and the concurrent presence of HIV/AIDS, cholera and plague. Ensuing negotiations clarified environment, health, and population issues that are central to the stability of the region and of priority interest to the United States, regional states, international organizations, and the non-governmental organizations (NGO) community.

Conference participants included senior representatives of United States Agency for International Development (USAID), the Department of State, Office of the Secretary of Defense, and the Environmental Protection Agency; public health experts from the Centers for Disease Control, the U.S. Pacific Command, the U.S. Army Medical Research Institute of Infectious Diseases, and the Commonwealth of Pennsylvania; diplomatic representatives from India, Switzerland, and Egypt; leaders of population, health and environment NGOs; academics from leading universities and think tanks; and representatives of the sponsoring organizations.



Conference Participants.

BACKGROUND

India is the world's largest democracy—a federal republic with a population exceeding one billion but possessing a gross domestic product of only about US \$1700 per capita. Tropical India is host to waterborne, water washed, and water vectored diseases that are endemic along its numerous rivers and agriculturally bountiful coastal plains. Poverty, illiteracy and a male-dominated culture contribute to the current HIV/AIDS epidemic in India, with 3.5 to 5 million persons infected and incidence on the rise. As in sub-Saharan Africa, HIV/AIDS in India is transmitted primarily through heterosexual contact.

India shares disputed borders with its populous neighbors Bangladesh, Pakistan, and China. In June 1998 the United States and other western nations imposed sanctions on India and Pakistan following each country's reciprocal nuclear weapons tests. U.S. sanctions suspended foreign assistance (other than humanitarian assistance, food, and agricultural commodities), military sales, and U.S. Government credits and credit guarantees. In October 1999 certain sanctions were waived; however, restrictions remain on USAID growth programs, military sales and aid programs, and loans or financial assistance for purposes other than basic human needs.

India's well-educated elite has benefited from the globalization of trade and communications. India possesses leading centers of academic research, information technology, and electronic commerce. The United States' Indian-American population of 1.68 million has doubled since 1990 and continues to grow in wealth and influence.

SCENARIO AND GAME

In the game scenario an earthquake and unusually heavy monsoon rains created a large displaced population and set the conditions for epidemics of both cholera and bubonic plague. While local and national governments struggled to ascertain the scope of the contagion, tropical cyclone warnings caused the rural coastal population to flee inland toward the center of the plague epidemic. Hospitalization of a large HIV/AIDS population consumed significant medical resources, complicating plague treatment. Concurrent with events in Asia, traveling businessmen from the technology sector unwittingly transported plague from India to Silicon Valley, in California.

Participants were assigned to one of four teams: United States Government, Regional Interests, Non-Governmental Organizations, and International Organizations. Each team defined its interests and the objectives of its constituents, and in three game turns negotiated crisis response, regional preventive measures, and US policy options for dealing with this confluence

of health, population, and environmental issues. Each team presented its proposals to the plenary session prior to adjournment.

U.S. INTERESTS

Key U.S. interests in South Asia include promoting stability, protecting American citizens, maintaining commercial sea-lanes, and preventing proliferation of weapons of mass destruction. Workshop participants focused on identifying approaches to promoting stability in South Asia in light of the population, health and environmental situation portrayed in the scenario.

DISASTER RESPONSE AND PREVENTION

Participants proposed that regional countries collaborate with U.S. government and international agencies to further develop South Asia's capability to predict and warn of impending disasters. While several Indian states proactively work to prevent and mitigate disasters, all regional countries would benefit from leveraging technology and sharing information through a natural disaster warning and information system.

Teams recommended that the U.S. share selected resources with regional states, including disaster prediction capabilities, cooperation on disease surveillance and epidemiology, and logistic support of relief operations. Expanded military-to-military cooperation with South Asian states would demonstrate U.S. commitment to regional stability and provide the U.S. military with an understanding of regional issues, cultures, and military capabilities.

SUSTAINABLE DEVELOPMENT TO IMPROVE HEALTH

Participants recommended that the United States encourage sustainable economic development to reduce poverty in South Asia and proposed eliminating trade barriers to stimulate economic growth. When remaining sanctions against aid and development financing in India and Pakistan are lifted, U.S. development assistance should be directed toward local efforts to build clean air and water infrastructure. Much of rural South Asia is without potable water and toilets, and uncontrolled urban growth leaves the slum dwelling urban poor with marginal water and sanitation as well as dirty air. Air and water infrastructure development would help to eliminate the conditions that harbor tuberculosis, malaria, dysentery, and cholera.

HALTING THE SPREAD OF HIV/AIDS IN INDIA



Map of India

India's spectacular economic growth has in recent years eclipsed a growing and unchecked HIV/AIDS epidemic. As this outbreak spreads, however, India's population and its economic vitality have the potential to enter a disastrous and destabilizing death spiral. Until a cure or vaccine for HIV/AIDS is discovered, any solution to this epidemic will be complex and benefit from resources not wholly available in India

Three groups must be targeted to resolve the HIV/AIDS crisis in India: the future generation, high-risk groups, and those who have fallen victim to the disease. A cost effective, but huge, educational program targeting school age boys *and* girls, would be the basis for protecting the future generation. This program would primarily increase students' self-esteem and self-respect to prevent their generation from falling victim to the triangle of abuse, risky sex, and addiction into which the currently infected generation has fallen. India's schoolteachers are uncomfortable addressing these issues, so a visual learning curriculum that instructs without teachers may be necessary to deliver this message.

India's high-risk population must learn to use condoms to escape the specter of HIV/AIDS. This population includes sex workers, truck drivers, migrants, homosexuals, and intravenous drug users. Condom availability and acceptability must become universal to protect those in this high-risk group. Thailand has successfully reversed its incidence of HIV/AIDS by making condoms universally available, acceptable, and cheap – the cost to flood the Indian market with condoms may exceed US\$1 billion per year.

Finally India must care for those fallen victim to HIV/AIDS. It must establish readily available, free and anonymous HIV testing to identify the victims. India must engage the medical profession to care for the poor and the high-risk groups – not just those who can afford to pay for care. It must reach its rural poor with caring public health services. This segment of the population is at greatest risk of unwittingly contracting HIV/AIDS, remaining undiagnosed, and further expanding the epidemic. And it must make readily available an inexpensive life-prolonging treatment regime such as the AIDS triple-cocktail that has been successfully employed in the U.S. and Brazil.

India's war on HIV/AIDS must be waged and won by India. But there is ample opportunity in this massive undertaking for help and resource support from the United States, other nations, international organizations, NGOs, foundations, corporations and individuals. The United States can gain stature and help ensure stability in South Asia by providing leadership and partnering with India to help it overcome this epidemic.

CONCLUSION

Contagion, overpopulation, and poverty threaten U.S. interests and contribute to instability in South Asia and elsewhere. These factors prevent progressive democracies from attaining their potential as economic partners and regional powers. The United States has great potential to employ its economic, political, military and informational influence to assist willing partners in overcoming health, population, and environmental challenges that threaten regional stability and promote conflict.

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